DOCUMENT RESUME

ED 480 821 PS 031 558

AUTHOR	Wilen, Julie Rubins
TITLE	Ready for School: The Case for Including Babies and Toddlers as We Expand Preschool Opportunities.
INSTITUTION	Ounce of Prevention Fund.
PUB DATE	2003-00-00
NOTE	17p.
AVAILABLE FROM	Ounce of Prevention Fund, 122 South Michigan Avenue, Suite 2050, Chicago, IL 60603-6198. Tel: 312-922-3863; Fax: 312-922-2173; Web site: http://www.ounceofprevention.org. For full text: http://www.ounceofprevention.org/downloads/publications/ready_for_school.pdf.
PUB TYPE	Opinion Papers (120) -- Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	Brain; Childhood Needs; Cognitive Development; *Early Childhood Education; Early Experience; Educational Policy; *Infants; Learning Readiness; Program Development; *Public Policy; *School Readiness; Social Development; *Toddlers
IDENTIFIERS	Brain Development; Early Head Start; *Program Characteristics

ABSTRACT

While the notion of starting education early with children has gained momentum in the public's mind, our public policies and investments still do not reflect society's increasing knowledge of how the human brain grows and how very early experiences beginning at birth affect a child's future. Arguing that if policymakers fail to include the needs of babies and toddlers as plans are made for universal preschool, in five years the conversation about "school readiness" will instead by about "preschool readiness," this brief examines the gap between what is known about early cognitive development and what is done when it comes to early care and education, and advocates a common conversation about school readiness and a unified movement to develop a voluntary, universal early learning system for children prior to kindergarten that builds upon existing programs and begins with children most at-risk for school failure. The brief expands the notion of school readiness to one encompassing the social-emotional development needed to navigate the preschool environment: approach new tasks with confidence, sit with other children in a group and listen, have sufficient vocabulary and language experience to communicate without disruptive behavior. Next, the brief summarizes research findings on the effects of early experiences on learning at preschool age and older. The brief then describes characteristics of birth-to-three programs, highlighting in particular Early Head Start. Financing models and strategies are then described, noting that the federal government and a few states, including Illinois and California, have implemented such innovative approaches as they build birth-to-five early learning systems. Critical elements for a birth-to-five system are also highlighted in the areas of accessibility, quality, and coordination with other early childhood services. The brief concludes by reiterating that as states engage in discussions to promote universal preschool programs, adequately addressing the learning and nurturing needs of children younger than age three must be at the forefront of the conversation. (Contains 13 notes.) (HTH)

Reproductions supplied by EDRS are the best that can be made
from the original document.

Published by
Ounce of
Prevention
Fund

ED 480 821

Ready for School

The Case for Including Babies and Toddlers As We Expand Preschool Opportunities

PS 031558

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Karen Freel

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

2

BEST COPY AVAILABLE

How do we ensure that children enter school eager to learn and ready to succeed?

How do we guarantee that children enter kindergarten, graduate from elementary school and prepare for high school having developed strong intellectual and emotional foundations from which to continue learning?

For decades, policymakers and early childhood practitioners have grappled with these issues, yet a fundamental question remains:
How early should "early" education begin?

BEST COPY AVAILABLE

A Smart Public Investment

While the notion of starting early with children has gained momentum in the public's mind, our public policies and investments still do not reflect society's increasing knowledge of how the human brain grows and how very early experiences beginning at birth affect a child's future. Some states are exploring and moving toward voluntary, universal access to preschool for three- and four-year-olds as part of an effort to improve the quality of early care and education available to all children. Since more than one-third of kindergartners are not considered ready to learn when they arrive at school,[1] universal preschool is desperately needed and must be strongly supported. Further, states should embrace the research and real-life experiences which are teaching us that success in school depends as much on characteristics formed during infancy and toddlerhood as it does on skills learned during the preschool years. If we truly want children to read by third grade, states must adopt the philosophy that children begin learning from their earliest days, weeks and months.

The bottom line is: If policymakers fail to include the needs of babies and toddlers as plans are made for universal preschool, in five years our conversations about "school readiness" will instead be about "preschool readiness."

Additional investment in high-quality preschool must be a national priority. In many communities across the nation, early education programs simply do not exist. In others, families cannot afford or access the programs that are available. Eligibility requirements may prohibit those families from enrolling their children in Head Start or their state's prekindergarten program. What's more, working parents often face great difficulties juggling the logistics of transporting their children between various part-day, part-year programs. Perhaps most alarming, research shows that a large percentage of child care settings do not provide quality child development services and, in fact, might actually pose harm.[2] All in all, far too many children arrive at school without the intellectual, social, emotional, and language skills they require to benefit fully from the educational system. Universal programs giving all families a choice of high-quality preschool options for their three- and four-year olds is a major step in the right direction.

BEST COPY AVAILABLE

1 *Ready for School*

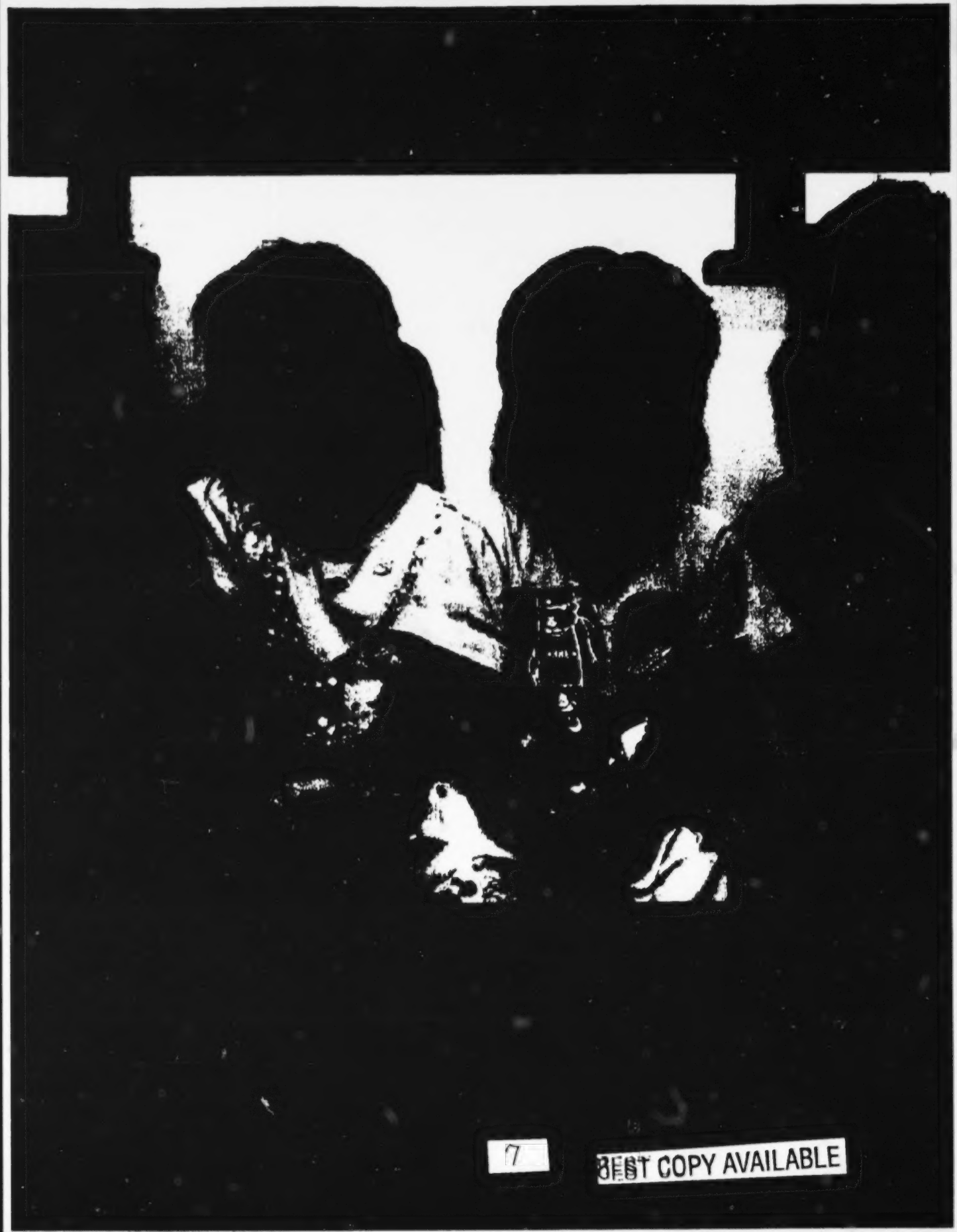
At the same time, the demand for programs that encompass the early learning needs of babies and toddlers is clear. In 2002, 56 percent of mothers with children younger than age one worked outside the home, according to the U.S. Bureau of Labor Statistics. What's more, over the past decade, a preponderance of compelling research has demonstrated the impressive benefits of providing high-quality early learning opportunities for all children from birth to age five–and the dire consequences of the lack of such opportunities. In fact, this research on the first five years of life, including Dr. Craig Ramey's seminal "Abecedarian Project," has driven much of the movement toward establishing universal preschool. However, Dr. Ramey and others started their interventions at birth. Thus, quality preschool education must be coupled with an equivalent focus on programs for infants and toddlers to ensure long-term, far-reaching outcomes, especially for those children most at-risk of school failure.

Why, then, is there such a wide gap between what we know and what we do when it comes to early care and education? Even today, many people mistakenly believe that infants and toddlers are "too young" to learn. The dynamic, rapid and nuanced development that occurs during children's first three years has led providers to develop a diversity of services and programs to meet the varied needs of infants, toddlers and their families. These types of services are often harder to understand than typical classroom or center-based preschool programs for four-year-olds. Policymakers, practitioners and parents are most familiar with nursery or preschool programs and may incorrectly expect birth-to-three programs to be rigid classroom settings with very young children sitting in chairs working with flashcards. In actuality, nurturing very early learning is really about supporting and encouraging parents to cultivate healthy relationships with their children.

The gap between what we know and what we do also exists because of misplaced priorities in public policymaking. First, the political rhetoric of the campaign trail–almost always emphasizing the critical importance of education–too rarely is translated into reality when public officials are devising and voting upon budgets. Second, while many states are grappling with staggering budget shortfalls and truly limited resources, early education is usually the last and least funded.

BEST COPY AVAILABLE

BEST COPY AVAILABLE



BEST COPY AVAILABLE

Solid studies showing the multiple benefits of investing in the early years counter these points. Dr. Arthur Reynolds, a University of Wisconsin researcher, has found that every $1 spent on high-quality early education programs saves society $7 in future costs for special education, delinquency, crime control, welfare benefits, lost taxes and other areas. This economic payoff has been confirmed by Dr. James Heckman, the 2000 Nobel Laureate in Economics and a University of Chicago professor. Dr. Heckman studied the cost benefits of investing in early education and concluded: "Unfortunately, in an era of tight government budgets, it is impractical to consider active investment programs for all persons. The real question is how to use the available funds wisely. The best evidence supports the policy prescription: invest in the very young and improve basic learning and socialization skills." These skills are the foundation that not only forms the building blocks for school but for life as well. As Dr. Heckman and others note, early and positive social-emotional development ultimately leads to "good citizenship" and life achievements.

In the end, closing the gap between what we know and what we do comes down to public will. The research proves the wisdom of investing in early childhood; local, state and federal policymakers should follow this wisdom. Conversations about early education should not–in fact, cannot–be separate or even competing conversations pitting preschool against birth-to-three programs. Rather, we need a common conversation about school readiness and a unified movement to develop a voluntary, universal early learning system for children prior to kindergarten that builds upon existing programs and begins with children most at-risk for school failure.

BEST COPY AVAILABLE

What Are School 'Smarts'?

What is school readiness? Society's expectations for what children should know—and when they should know it—have changed over the years. Today, many expect young children to arrive at school able to perform a variety of intellectual tasks: counting from one to ten, recognizing colors and shapes, reciting the alphabet, and writing their names. However, we now know that school readiness includes much more than developing fundamental cognitive and language skills. To be successful in school, children must master a variety of behavioral skills as well. For example, on the first day of kindergarten, teachers expect children to be able to listen, follow directions, be interested in toys and tasks, start and finish small projects, express their needs, respect others, be able to wait and know when they need help. To do these things, children must have developed a sense of confidence and self-control over their bodies, behavior and world; they must have developed a sense of curiosity, as well as the ability to communicate and relate to others. These are difficult, inter-related skills that must be nurtured during a child's earliest years in a variety of learning situations.[3]

Very young children can—and, to be successful, must—develop a "school literacy" more basic than knowledge of 1-2-3s and A-B-Cs. In short, children must learn how to learn. Children who are "ready to learn" in preschool and beyond have a solid emotional foundation, gained very early in life, that they bring to school and all new learning situations. Children's interactions with parents and relationships with other caregivers in the first months and years have an amazingly strong and life-long influence on their social-emotional development. Children as young as nine months begin to develop a sense of themselves as capable of accomplishing new and challenging tasks, and will approach new learning opportunities accordingly. If children have not received responsive care and encouragement early in life and have not developed a strong sense of confidence in themselves as learners, preschool and kindergarten teachers may find it very difficult to engage them in challenging learning activities. Thus, their lack of confidence can become a self-fulfilling prophecy that limits their ability to succeed.

Many children arrive at preschool without these fundamental social-emotional skills. Preschool teachers and child care providers report that disruptive behavior is the single greatest challenge they face in the classroom. In fact, 42 percent of child care programs in Illinois have asked families to withdraw their infant or toddler because the program was unable to handle the child's social or emotional problems (e.g., biting, tantrums, hitting, throwing objects, inconsolable crying and sleep problems).[4] Nationwide, a similarly alarming percentage of young children are struggling with emotional and behavioral problems that pose a risk for early school failure, poor later school outcomes and difficulties in the workplace in their adult lives.[5]

How can we expect preschoolers to be "tuned into teaching"—to learn their letters or learn to read—if they cannot sit with other children in a group and listen to a teacher?

Basic language and communication skills are also important building blocks of preschool readiness that are formed during the first three years after birth. Research has shown that vocabulary development depends in large part on language experiences during infancy and toddlerhood. The average child from a professional family hears 215,000 words per week; a child from a working class family hears 125,000 words per week; and a child from a family receiving welfare benefits hears 62,000 words per week.[6] Children who hear fewer words and are engaged in less conversation before age three have dramatically smaller vocabularies than those with richer early language experiences and are unlikely to ever "catch up" to their more advantaged peers. In fact, language experience before age three is an excellent predictor of reading ability in third grade.[7]

BEST COPY AVAILABLE

Ultimately, poor oral communication skills can impede all aspects of children's learning by interfering with the child's ability to understand the teacher and the teacher's ability to understand the child.

How do we lay early foundations of learning strong enough to support children through school and into adulthood? For some children, 2 1/2 hours of preschool a few days a week may be sufficient. However, for young children struggling with economic, social and psychological stressors, a different course of action may be necessary to avoid early school difficulties. For these children, research suggests that exposure to multiple poverty-related risks increases the odds that these children will demonstrate more behavioral problems and less social and emotional competence.[8] This makes a preschool teacher's job of teaching, and a child's job of learning, particularly hard. To wait until children are three or four years old ignores the potential of linking younger children to essential services, providing parent education and family support at one of the most critical periods of parenthood, and enriching the lives of children at a time when the greatest and most long-lasting benefits can be gained. Growing universal preschool and birth-to-three programs concurrently, especially for children at risk, is essential.

While good early experiences help the brain develop well, poor experiences can literally cause a genetically normal child to have a lower I.Q. Scientific evidence shows that maltreated children who receive little stimulation—children who are exposed to fewer colors, less touch, little interaction with adults, fewer sights and sounds, and less language —actually have smaller brains.[9] Highlights from some of the major research studies include:

The foundations for learning, healthy development and how children will interact with the world are built in the very early years. Research findings from "From Neurons to Neighborhoods: The Science of Early Childhood Development" conclude:

- Early environments matter and nurturing relationships are essential. What happens during the first months and years of life is critical because it sets either a sturdy or fragile stage for what follows. Emotional development and academic learning are far more closely intertwined in the very early years than has been previously understood. Elements of early childhood programs that enhance social and emotional development are just as important as the components that enhance linguistic and cognitive competence.
- Parents and other regular caregivers are "active ingredients" of environmental influence during the early childhood period.

Intensive, early intervention starting at birth has a long-lasting impact on children's lives. Research findings from Dr. Craig Ramey's Abecedarian Project and the Syracuse Family Development Research Program conclude:

- Young children who receive high-quality early education do better in school academically, are better behaved in classes, and are more likely to stay in school and graduate. They also are less likely to need costly special education services or become teen parents.
- Later in life, children in the Syracuse Program had less involvement with the juvenile justice system and were less likely to engage in severely deviant behavior. The Syracuse Program bolstered child and family functioning and fostered prosocial attitudes and behavior, education and family unity.

"On a purely economic basis, it makes a lot of sense to invest in the young." Research conducted by Dr. James Heckman, the 2000 Nobel Laureate in Economics, concludes:

- Wise public investments in young children can increase the odds of favorable developmental outcomes.
- Investments in social policies that intervene in the very early years have very high rates of return while social policies that intervene at later ages in the life cycle have low economic returns. Early childhood interventions of high quality have lasting effects on learning and motivation.

BEST COPY AVAILABLE

What Are Birth-to-Three Programs?

In the increasingly complex lives of today's families, parents and children often need different things at different times to be successful. Programs that reach families early and offer flexible service options have the largest impact on infants, toddlers and their parents. Some states and communities have responded by developing and funding a diverse array of birth-to-three programs that offer families a variety of options, including: Early Head Start, voluntary home visiting programs, center-based and home-based child care programs, family resource centers and family support groups, and parent-child activities sponsored by libraries, park districts and places of worship.

Effective birth-to-three services have similar fundamental principles regardless of their program model. From its beginning in 1994, the federal Early Head Start program for children from birth to age three —an expansion of Head Start— has been known for its high-quality standards and effectiveness.

Early Head Start enables communities to design flexible programs through a variety of service delivery mechanisms but requires, at a minimum, that programs follow a set of principles that are carefully designed and research-based.

The principles include:

- High-quality services and referrals that promote physical, social, emotional, cognitive and language development;
- Comprehensive and flexible programs that respond to the varied needs of families;
- Family-centered and community-based programs that focus on the child and the family together in the context of their culture and community;
- Caring, responsive and well-trained staff who have knowledge of infant/toddler development and can understand and address parental needs and concerns;
- Programs that support parents as primary nurturers, educators, and advocates for their children;
- Programs that provide parents with an opportunity for their own growth and development ; and
- Programs that provide smooth transitions into Head Start or other preschool programs and collaborate with other community resources.

Each day, an estimated 6 million children younger than age three spend some or all of their day being cared for by someone other than their parents.[10] These child care arrangements offer varying degrees of quality. Studies show that the quality of care an infant receives is critically important for the child's development [11] and that poor children who receive enriched early experiences in high-quality child care centers experience better linguistic, cognitive, and pre-academic outcomes as well as fewer behavioral problems.[12] Unfortunately, only 12 to14 percent of infants and toddlers enrolled in organized child care programs nationally receive "good quality" education and care. What's more, between 35 and 40 percent are enrolled in programs that are potentially harmful to their growth. The remainder of the children are in settings that are safe but may not promote learning.[13] It is imperative, then, that our society develop ways to improve the quality of care that a generation of children is receiving. Without such improvement, crucial and irreplaceable years of learning will be lost.

An established infrastructure of preschool programs for three- and four-year-olds has existed for nearly 40 years in our nation, since the founding of the federal Head Start program in 1965. Although parent and child centers and migrant programs opened to serve children under age three and their families shortly after Head Start's development, the national establishment of high-quality and well-supported programs serving infants and toddlers did not gain traction for another 30 years. As part of the 1994 Head Start Reauthorization Act, Early Head Start was launched as a comprehensive early childhood program for children from birth to age three.

The cornerstone of Early Head Start's comprehensive approach is meeting the full range of children's and family's developmental needs – social, emotional, cognitive and physical. Children in these programs receive early childhood education, health care and nutrition services. Simultaneously, their parents receive a range of social support services and parent involvement activities in center-based, home-based or a combination of program settings.

A major national evaluation shows that Early Head Start is effective in developing "preschool readiness"— ensuring children are healthy, confident, curious young learners, often despite overwhelming barriers.

In addition, research shows that providing support to parents, and increasing parents' own self-sufficiency and well-being, strengthens their ability to be a strong positive influence on their children's lives and later education.

Conducted by the U.S. Department of Health and Human Services, the national evaluation assessed 3,000 children and families in programs that were funded in 1995 and 1996. Parents and children were evaluated when the children were 14, 24 and 36 months of age.

This evaluation found that three-year-old Early Head Start children performed significantly better on a range of measures of cognitive, language and social-emotional development than control group children. In addition, their parents scored significantly higher on many aspects of the home environment and parenting behavior (e.g., more emotionally supportive, more supportive of language and learning; more likely to read daily to children and less likely to engage in punitive forms of discipline such as spanking) than control group parents.

As more states begin to grapple with expanding preschool opportunities, the question is: Will we have to wait another 30 years before babies and toddlers are fully included in early education?

BEST COPY AVAILABLE

How States Can Make This Happen: Financing Models and Strategies

Building and funding a birth-to-five learning system that meets the ever-changing needs of young children and families requires creative and effective financing models. Successful strategies expand resources for preschool and simultaneously grow programs for infants and toddlers. The federal government and a few states have implemented such innovative approaches as they build birth-to-five early learning systems.

Federal government

Based on research underscoring the efficacy of programs that intervene early with infants, toddlers and their families, the 1994 Head Start Reauthorization Act expanded Head Start by creating Early Head Start to serve pregnant women and children aged birth to three. The Act mandated that a specific portion of all Head Start dollars be available for programs serving infants and toddlers. This federal "set-aside" for Early Head Start has increased since its inception to its current level of ten percent of Head Start funds. The concept of a set-aside fosters concurrent expansion for both Head Start and Early Head Start.

The federal government also formally recognized the important needs of infants and toddlers in two other critical pieces of legislation: the Child Care and Development Block Grant and the Individuals with Disabilities Education Act. Congress has earmarked $100 million for an infant-toddler set-aside in the Child Care and Development Block Grant to help states improve the quality of infant and toddler child care.

Additionally, the Individuals with Disabilities Education Act includes a specific section – Part C: The Early Intervention Program for Infants and Toddlers with Disabilities – to ensure that states implement a process of identifying, evaluating, and serving infants and toddlers who have developmental delays, disabilities or are at significant risk of developmental delays.

Illinois

Illinois is among the states that have begun to recognize the value of investing in early education to better prepare young children for school. The state utilizes the Illinois State Board of Education's (ISBE) early childhood education funding stream, the Early Childhood Education Block Grant, to fund preschool expansion and birth-to-three programs.

In 1985, as part of a school reform effort, the state's prekindergarten program for at-risk three- and four-year-olds was created. In the late 1980s, two statewide programs for families with children younger than three years of age, one with a universal approach and one targeted to high-risk communities, were started by ISBE. In the 1990s, conversations emerged about block granting a variety of state-administered education programs, and in 1997 the Early Childhood Education Block Grant was enacted. At the same time, the state legislature, reacting to an explicit need from preschool teachers for better prepared four-year-olds, borrowed the precedent established by the federal government with Early Head Start and created a set-aside in the Early Childhood Education Block Grant for programs serving infants, toddlers and their parents. Today in Illinois, this 11 percent set-aside funds programs serving thousands of very young children and their families. Currently, the Block Grant allows school districts and other entities (e.g., Head Start programs, child care providers and parenting programs) to apply to the State Board of Education for funds.

Early Education: Critical Elements for a Birth-to-Five System

California

In 1998, California voters passed The California Children and Families Act or Proposition 10, which created a state California Children and Families Commission and 58 county Children and Families Commissions, collectively known as First Five California. Proposition 10 aims to support children from the prenatal period to age five by creating a comprehensive and integrated system of services to promote early childhood development.

Through Proposition 10, approximately $700 million each year is collected from the tobacco tax. Twenty percent of the funds are used by the State Commission for statewide education and research, and 80 percent of the funds go directly to the county commissions to fund local programs. The Act stresses the importance of young children receiving nurturing interaction with their parents and other caregivers, good health care and nutrition, and stimulating learning opportunities to be ready for school. All California children from birth to the age of five and their families are eligible for services, regardless of residency status or income level.

As states move toward universal preschool, the following key policy principles can ensure access and provide quality programs for all young children and link preschool programs to existing early childhood services.

Ensure Accessibility:

- Every three- and four-year-old whose parents select it should have access to at least two years of quality early education.
- For high-risk children, states must offer quality birth-to-three programs and services to ensure preschool readiness. Priority should be given to families in low-income communities.
- Parents should be able to choose from a variety of early education and care settings, including schools, child care programs, Head Start and Early Head Start programs, nursery school programs, tuition-based preschool, home visiting programs, community centers, parent-child activities, and drop-off programs at libraries, park districts and places of worship.
- Programs should emphasize continuity of services for young children to minimize frequent and often stressful transitions.
- Families should be offered an array of service options, schedules (including full-day and half-day formats as well as school-year and year-round schedules) and locations (including homes and other community-based settings).

Ensure Quality:

- Programs should be comprehensive in nature and meet the full range of children's and family's developmental needs – social, emotional, cognitive, communication and physical. Children should receive early childhood education, health care and nutrition services, and attention should be given to all domains of development.
- Programs should employ highly qualified teachers and assistants who are knowledgeable about early childhood education and child development and work closely with parents.
- Services should be developmentally appropriate for children and include opportunities for parent involvement and participation in parent education and support activities.
- Quality standards, including appropriate class size and child/teacher ratios, should guide program design.
- Periodic assessments of children and regular program evaluations should be conducted.

Ensure Coordination with Other Early Childhood Services:

- Federal, state and local governments should develop and implement plans for a birth-to-five system in a collaborative process that includes schools, child care, Head Start and Early Head Start, health care, other early childhood stakeholders, employers, local government officials and others.

BEST COPY AVAILABLE

Conclusion: Learning Begins at Birth

During times of fiscal constraint, states must make tough but well-informed decisions about public policies and investments, especially those affecting the current and future well-being of society's youngest children. Any allocation of resources should reflect the current research about what works to improve the school outcomes for young children. We need to listen to the research even when the message is complex.

The social policy implications of the research are clear: If society is committed to having all children enter school ready to learn, providing one year of preschool to four-year-olds may be too little too late.

As states engage in discussions to promote universal preschool programs, adequately addressing the learning and nurturing needs of children younger than age three must be at the forefront of the conversation.
Plans for universal preschool should earmark funds – building upon the precedent of Early Head Start's birth-to-three set-aside – to create an infrastructure for birth-to-three programs within the framework of universal preschool. States that develop a birth-to-five early learning system will more effectively meet the existing and future demands that families are experiencing and better prepare children for success in school. Moreover, the new partnerships forged by creating a birth-to-five approach will generate even more momentum to sustain and expand investments in early education.

Children must enter school ready to learn. The early foundations of learning must be stable enough to carry them through school and into adulthood. Clearly, preparing all children for school from their earliest days is a mandate our society cannot afford to ignore.

BEST COPY AVAILABLE

Notes

1 Knitzer,J. (2001). *Using Mental Health Strategies to Move the Early Childhood Agenda and Promote School Readiness*. New York, NY: Carnegie Corporation of New York & National Center for Children in Poverty.

2 The Cost, Quality, and Child Outcomes Study Team (1999). *Cost, Quality, and Child Care Outcomes in Child Care Centers*. Denver, CO: University of Colorado at Denver, Economics Department.

3 ZERO TO THREE: The National Center for Clinical Infant Programs (1992). *Heart Start: The Emotional Foundation of School Readiness*. Arlington, VA.

4 Cutler, A. & Gilkerson, L. (2002). *Unmet Needs Project: A Research, Coalition Building, and Policy Initiative on the Unmet Needs of Infants, Toddlers and Families*. Chicago, IL: University of Illinois at Chicago and Erikson Institute.

5 Rimm-Kaufman, S.E., Pianta, R., & Cox, M. (2000). Teachers' judgments of success in the transition to kindergarten. *Early Childhood Research Quarterly*, 15 (2), 147-166.

6 Hart, B. & Risley, T.R. (1995). *Meaningful Differences in the Everyday Experience of Young American Children*. Baltimore, MD: Brookes Publishing.

7 Hart, B. & Risley, T.R. (1995). *Meaningful Differences in the Everyday Experience of Young American Children*. Baltimore, MD: Brookes Publishing.

Snow, C. E., Burns, M. S., & Griffin, P. Editors (1998). *Preventing Reading Difficulties in Young Children*. National Research Council, Committee on Prevention of Reading Difficulties in Young Children. Washington, D.C.: National Academy Press.

8 West, J.; Denton, K.; & Reaney, L. M. (2001). *The Kindergarten Year: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-1999*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.

9 De Bellis, M.D., Keshaven, M.S., Clark, D.B., Caseey, B.J., Giedd, J.B., Boring, A.M., Frustaci, K., & Ryan, N.D. (1999). Developmental traumatology. Part 2: Brain development. *Biological Psychiatry*, 45, 1271-1284.

10 Ehrle, J., Adams, G. and Tout, T. (2001). *Who's Caring for Our Youngest Children: Child Care Patterns of Infants and Toddlers*. Washington, D.C.: The Urban Institute.

11 NICHD Early Child Care Research Network (2002). Child care structure to process to outcome: Direct and indirect effects of child care quality on young children's development. *Psychological Science*, *13*, 199-206.

12 Shonkoff, J. & Phillips, D. (Eds.) and National Research Council (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, D.C.: National Academy Press.

13 Whitebook, M., Howes, C., & Phillips, D.A. (1990). *Who cares? Child Care Teachers and the Quality of Care in America*. Final report of the National Child Care Staffing Study. Oakland, CA: Child Care Employee Project.

The Cost, Quality, and Child Outcomes Study Team. (1999). *Cost, Quality, and Child Care Outcomes in Child Care Centers*. Denver, CO: University of Colorado at Denver, Economics Department.

Galinsky, E., Howes, C., Kontos, S., & Shinn, M. (1994). *The Study of Children in Family Child Care and Relative Care: Highlights of Findings*. New York, NY: Families and Work Institute.

Founded in 1982, the Ounce of Prevention Fund invests in the healthy development of infants, toddlers, children, adolescents and their families.

© Copyright 2003

Ounce of Prevention Fund
Writer: Julie Rubins Wilen
Designer: Sam Silvio/Silvio Design, Inc.
Printer: IPP Lithocolor Inc.

BEST COPY AVAILABLE

Ounce of Prevention Fund
122 South Michigan Avenue, Suite 2050
Chicago, Illinois 60603-6198
Telephone 312.922.3863
Fax 312.922.2173
www.ounceofprevention.org

BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

[X] This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

[ ] This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (1/2003)

PS 031568